\*120\*

Quality Control

304 R 1!			·					· · · · · · · · · · · · · · · · · · ·			<del></del>
Work Order February-06-14 10			*112	741*						Page 1	,
Revision ID:	3493-1 asher		Accept	*N900	<u>040</u>	100	)* s	Setup Start	I VI	S1* S2*	Manufactor Co.
Start Date: 2/0 Required Date: 2/2 Reference:	Start Qty: 80.0 20/14 Req'd Qty: 80.0			Cust Item I Customer:	D:						4
	Process Plan:ML5	Date: 14-02-06  Date:			ate:	·	F	Run Start Stop	1/1	R1* R2*	and the state of t
Sequence ID/ Work Center ID	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp	Table 1
Draw Nbr	Revision Nbr										
D3493	Rev A									,	
*100  *100* Hardinge Hardinge CNC Lathe Sn	Hardinge CNC LATH <b>Memo</b> nall 1-Turn a	HE SMALL s per Folio FA626 & Dwg D349	0.00 0.00 932-Deburr				80	<b>-</b> Ø		OFC 201	14-02-
110 *110* QC	QC2- Inspect parts of <b>Memo</b>	f machine FAI/FAIB	0.00				80	<b>_</b> d		JFC_20	)H-0Z
Quality Control	QC8- Inspect parts - :	second check	0.00							OAS	

0.00

Memo

2014/02/22

DQA:	·	. Date:						_				TQ AC
QA Closed:		Date:			WORK ORDER NON-	-CC	ONFO	RMANCE / UF		/ork Order ug	ndate only	AEROSPACE
					DISPOSITION					EPARTMENT	····	1
Work Orde	er:								AGAINST D	_		
					Rework			Skid-tube	Crosstube		Water Jet	Engineering
Part N	lo				Scrap			Machining	Small Fab	Pro	d. Eng. Coor.	Quality
					Use-as-is		Thern	noforming	Finishing	Rec/Sto	re/Packaging	Other
NCR N	lo				Suspected Unapproved			Large Fab	Composite		Supplier	
Root				Desci	ription of work order update		nitial	Acti	ion	Sign &		
Cause	Date	Step	Qty		or non-conformance	Ch	ief Eng	Descr	iption	Date	Verification	QC Inspector
Design												
Doc/Data												
Equip/Tooling												
Handling/Pre												
Material												
Operator												
Offset/Setup												
Process												
Supplier												
Training												
Transport												
Unapproved												
						FAI	ULT CAT	EGORY				
Landir	ng Gear				General		_					
	Bending				Bend		Folio/P	rogram		Outside Dim	ensions	Pressure/Forced
ļ	Centre N	ot Concer	ntric		BOM/Route		Grain			Over/Under	tolerance	Set-up
	Cracks				Broken/Damage/Defect		Hardwa	re		Part Incorred	ct	Temperature/Cure
	Crimp/Kii	nk/Ripple	/Wave		Burrs		Inspecti	on Incomplete/Un	qualified	Part Lost/Mi	ssing	Weld
	Cuffs				Contamination		Instruct	ions Incomplete/U	Inclear	Part Moved		Wrong Stock Pulled
	Crushing				Countersink		Misalig	ned/off center		Positioned V	Vrong	<del></del>
	Heat Trea	at			Cut Too Short		Mislabe	led		Power Loss/	Surge	Other
	Inspectio	n Strip in	Tube		Drawing		Misread	1	_			
	Marks/Cl	natter			Drill Holes		Off-set					
	Turning S	•			Finish		Out of (	Calibration				
	Wave/Tw	ist in Tub	oe .		Fit/Function		Out of	Sequence				

H:/FORMS/Quality Assurance\approved QA/NCRWO RevH

Work Order ID 112741 \*112741\* February-06-14 10:49:50 AM Item ID: D3493-1 Accept \*N900040100\* Setup Start **Revision ID:** Item Name: Washer \*80\* 2/06/14 **Start Qty: 80.00 Start Date: Cust Item ID:** Required Date: 2/20/14 Req'd Qty: 80.00 \*80\* **Customer:** Reference: Run Start Process Plan: Approvals: Date: Tooling: Date: \_\_\_\_\_ Stop SPC (Y/N): QC: \_\_\_\_ Date: Date: Sequence ID/ Operation Set Up/ Tool ID Tool # Plan Reject Accept Reject Insp. Work Center ID Description Code Qty Number **Run Hours** Qty Stamp Identify as per dwg & Stock Location: 130 0.00 \*130\* Packaging 0.00 Memo Packaging

0.00

0.00

QC21- Final Inspection - Work Order Release

Memo

140

QC

\*140\*

Quality Control

P14-02-25

Page 2

DQA:			Date:										
			5.			WORK ORDER NON-	-CC	ONFO	RMANCE / UPDA				AEROSPACE
QA Closed:			Date:							W	ork Order up	date only	
Work Orde	er:					DISPOSITION			A	AGAINST DE	PARTMENT	/PROCESS	
					_	Rework			Skid-tube Cr	rosstube	1	Water Jet	Engineering
Part N	No.					Scrap			<del></del>	mall Fab	Pro	d. Eng. Coor.	Quality
					_	Use-as-is		i	~ <b></b>	inishing	-4	re/Packaging	Other
NCR N	٧o.					Suspected Unapproved			~ <del> </del>	mposite	1	Supplier	
_		•											
Root					Desci	ription of work order update	1	nitial	Action		Sign &		
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Descriptio	n	Date	Verification	QC Inspector
Design													
Doc/Data	Ш												
Equip/Tooling													
Handling/Pre													
Material													
Operator	Ц												
Offset/Setup													
Process	Ц												
Supplier	Ш												
Training	Ш												
Transport	Щ												
Unapproved					·								
							FAI	ULT CAT	TEGORY				
Landii	ng Gea					General		1 .		_	7	_	_
	$\vdash$	nding			-	Bend		1	rogram	<u> </u>	Outside Dim	<u> </u>	Pressure/Forced
	$\vdash$		t Concer	ntric	-	BOM/Route		Grain			Over/Under	tolerance	Set-up
	——	acks			<u> </u>	Broken/Damage/Defect		Hardwa			Part Incorred	<del> </del>	Temperature/Cure
		-	k/Ripple,	/Wave		Burrs		Inspecti	ion Incomplete/Unquali	ified	Part Lost/Mi	ssing	Weld
	Cu				<u> </u>	Contamination		1	ions Incomplete/Unclea	ar	Part Moved		Wrong Stock Pulled
	_	ushing			<u> </u>	Countersink	<u> </u>	1	ned/off center		Positioned V		_
	$\vdash$	at Trea				Cut Too Short	-	Mislabe			Power Loss/	Surge	Other
	_		Strip in	Tube	<u> </u>	Drawing	_	Misread	d				
	⊢	arks/Ch			<u> </u>	Drill Holes		Off-set					
	_		equence		<u> </u>	Finish		4	Calibration				
	ı IW	ave/Tw	ist in Tub	e	- 1	Fit/Function	1	Out of 9	Sequence				

February-06-14 10:49:55 AM

Work Order ID: 112741

\*112741\*

Parent Item:

D3493-1

\*D3493-1\*

Parent Item Name: Washer

**Start Date: 2/06/14** 

Required Date: 2/20/14

**Start Qty: 80.00** 

Required Qty: 80.00

**Comments:** 

IPP Rev: A New Issue 06-02-28 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	_	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304R1.000		Purchased	No			100	f	75.2500	0.0291	3			
*N4204D4	$\cap \cap \cap *$								**				

W.304R1 000

304 round bar 1.00

<b>Location</b>	Loc Qty	Loc Code
MAT012	75.25	
m128005	75.25	

3 JFC 2014-02-19 MALL not pull out in system!!

DQA:			Date:											***	<b>™</b> A DT
QA Closed:			Date:			WORK ORDER NON	-C(	ONFO	RMANCE / UP	DATE	W	ork Order up	ndate only   [	$\neg$	AEROSPACE
						DISPOSITION				ACAINST	•		<u> </u>		
Work Orde	er:					DISPOSITION				AGAINST	DE	PARTMENT,	PROCESS		
						Rework			Skid-tube	Crosstube			Water Jet		Engineering
Part N	۱o					Scrap			Machining	Small Fab		Pro	d. Eng. Coor.[		Quality
						Use-as-is		Thern	noforming	Finishing		Rec/Stor	re/Packaging		Other
NCR N	No. <u> </u>					Suspected Unapproved	]		Large Fab	Composite	L_		Supplier		
Root					Desci	ription of work order update		Initial	Actio	on		Sign &		Т	
Cause		Date	Step	Qty		or non-conformance	Ch	nief Eng	Descri	ption		Date	Verification		QC Inspector
Design															•
Doc/Data															
Equip/Tooling															
Handling/Pre															
Material						•									
Operator															
Offset/Setup															
Process	_														
Supplier															
Training															
Transport															
Unapproved															
			<del> </del>				FA	ULT CAT	regory						
Landir					_	General		-			_	•			
	—	ending			<u> </u>	Bend		-	Program			Outside Dim	ensions	F	Pressure/Forced
,	—		t Concer	ntric	<u> </u>	BOM/Route		Grain			L	Over/Under	tolerance	;	Set-up
	_	racks			<u> </u>	Broken/Damage/Defect	L	Hardwa	re		L	Part Incorred	ct [	1	Temperature/Cure
	$\neg$		k/Ripple	/Wave		Burrs		<b>-</b>	ion Incomplete/Und	•	L	Part Lost/Mi	ssing	\	Weld
		uffs			<u> </u>	Contamination		7	ions Incomplete/U	nclear		Part Moved	L	\	Wrong Stock Pulled
	_	rushing			<u> </u>	Countersink		₹ 7	ned/off center			Positioned V			
	_	eat Trea			<u> </u>	Cut Too Short	_	Mislabe				Power Loss/:	Surge		Other
		-	Strip in	Tube		Drawing		Misread	<del>d</del>						
		larks/Ch				Drill Holes	_	Off-set							
	_	_	equence		$\vdash$	Finish	<u> </u>	4	Calibration						
	I۷	/ave/Tw	ist in Tub	e	- 1	Fit/Function	1	Out of 9	Saguence						·

DART AEROSPACE LTD		Work Order:	112741
Description: Washer	.ine <sup>4</sup>	Part Number:	D3493-1
Inspection Dwg: D3493 Rev: A			Page 1 of 1

## FIRST ARTICLE INSPECTION CHECKLIST

X First Article Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.192	+0.000/-0.005	0.189	<b>✓</b>		micrometer	JFC-02
Ø1.000	+/-0.010	1-000	$\checkmark$		Caliper	JFC-01
Ø0.958 x 100°	+/-0.010	0,958×100°			11	11
Ø0.516	+0.008/-0.001	0.518	/		CalipartPin	" +Shop
			;			
-						
			A CONTRACTOR OF THE PARTY OF TH			

Measured by: JFC
Date: 2014-02-19

Audited by: 9-89
Prototype Approval: N/A

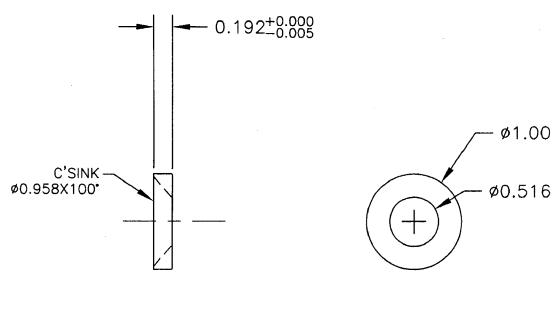
Date: 2014-02-19
Date: 2014-62/22
Date: N/A

Rev	Date	Change	Revised by	Approved
Α	06.09.01	New Issue	KJ/JLM	
В	06.11.22	Ø0.516 dimension removed	KJ/JLM 1.A	
С	08.04.30	Dimensions updated	KJ/DD ox	77



	ESIGN	PH	DRAWN BY	DART	AEROSPACE PORT HADLOCK, V		INC.
T	HECKED	M	APPROVED A	DRAWING NO.			REV. A
l		#	TH	D3493		SH	EET 1 OF 1
	ATE			TITLE			SCALE
	06.01	.04		WASHER			1:1
	Α		06.01.04	NEW ISSU	JE		

Ø1.000



D3493-1 WASHER

## D3493-1 WASHER

MATERIAL:

AISI 304/316 STAINLESS STEEL Ø1.000 ROUND BAR (REF DART MATERIAL SPEC M304R1.000)

ALL DIMENSIONS ARE IN INCHES 2)

3). TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

BREAK SHARP EDGES 0.005 TO 0.010 MAX

DELEASED OF HE

UNCONTROLLED COPY SUBJECT TO AMENDMENT

Copyright © 2006 by DART AEROSPACE USA, INC.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.